

MAR 29 1944

The **Management** **REVIEW**



MARCH, 1944

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AMERICAN MANAGEMENT ASSOCIATION

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DESPITE the rising tide of strikes and labor's revolt against the "Little Steel" formula, an inflationary wage-price spiral can still be averted. This is the conclusion of Sumner H. Slichter, who takes a dispassionate look at the labor situation in the month's feature abstract.

Under our national wage policy approximately 50 per cent of wage earners have fared well, according to Professor Slichter, though advances in wage rates have been less than is generally suspected. However, the "Little Steel" formula has worked a grave injustice to time workers (as opposed to pieceworkers and bonus workers), and modification is badly needed. Furthermore, he feels, there is no logical reason why cost-of-living wage adjustments should stop with May, 1942. But while revision of the formula may be called for, it need not be scrapped entirely, as some unions have demanded.

Advocating repeal of the Smith-Connally Act, the author declares that in most cases the law has been simply ignored. (Even where strike ballots have been taken, the majority of workers generally have been in favor of interrupting production.) Labor for the most part seems well-intentioned, however, and what is most needed is a firmer government policy toward the irresponsible minorities who resort to strikes to win concessions. Some positive steps that can be taken are outlined by Professor Slichter on the following pages.

Incidentally, statistics cited on page 82 indicate that war workers today are much better off than were their fathers in the first World War. Purchasing power of wages has increased more than three times as fast recently as in World War I.

JAMES O. RICE, Editor, 330 West 42nd Street, New York 18, N. Y.

M. J. DOOHER, Associate Editor

ALICE L. SMITH, Assistant Editor

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THE MANAGEMENT INDEX

General Management

The Labor Crisis

REPRESENTATIVES of labor have called the "Little Steel" formula, which is the heart of our wage policy, "outdated," "unworkable" and "untenable" in the light of price increases. Wage demands are now being presented by many unions, which, if granted, would smash the formula.

The time lost from strikes is rising. During seven months of 1943, labor disputes cost twice as much time as during all 1942.

The Smith-Connally Act, designed to prevent strikes among war workers by requiring notice of intention to strike and a government-conducted strike vote, has proved a farce. In over 95 per cent of the strikes in war industry, the law has been simply ignored.

Is the national wage stabilization policy about to break down? Is the lid on wages and prices about to blow off? Is the no-strike pledge given to the President by union leaders shortly after Pearl Harbor about to go into discard?

Let us see how labor has fared during the war. Next to farmers, wage earners have had a faster rise in incomes than any other group in the country. Payrolls have considerably more than

doubled since 1939, and this year will exceed 100 billion dollars for the first time. However, this spectacular rise in payrolls has not been brought about in the main by a higher price of labor. Indeed, less than one-fourth of this rise, or about 13 billion dollars, is attributable to the rise in the price of labor. *Had every wage rate in every plant in the United States been frozen in 1939, payrolls still would have doubled.* The biggest cause of larger payrolls has been more people at work. This accounts for over one-third of the rise, or about 21.2 billion dollars. The next largest source of greater payrolls has been the movement of millions of men from low-paying to high-paying plants and industries, accounting for 13.4 billion dollars of the increase. About 7.1 billions of the increase in payrolls is explained by the longer working week, and 2.1 billions by penalty overtime.

The advance in the price of labor has been considerably less than the public suspects. Current figures on average hourly earnings greatly exaggerate the rise in the price of labor because they are based upon the present distribution of workers among industries and, there-

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fore, are raised by the large movement of workers to high-paying industries, and also by penalty overtime. The average increase in the price of labor in all industries between 1939 and July, 1943, was perhaps somewhat more than 20 per cent, but in the same period the index of the cost of living rose 24.7 per cent.

Has the national wage policy been fair to the country and fair to the workers? It has been denounced as unfair to the country on the ground that raising wages to meet increases in the cost of living would force up prices, thus creating a vicious spiral. The steady decline in the rate at which wages have increased during the past two years refutes this criticism.

But has the policy been fair to the workers? The "Little Steel" formula permits the wage rates of groups of workers to be raised by 15 per cent above January, 1941, the amount by which the cost of living increased between that time and May, 1942, the effective date of the "Little Steel" decision.

Workers argue that if it is fair to protect wages against the rise in the cost of living up to May, 1942, it is fair to protect them beyond that date. Since May, 1942, the index of the cost of living has gone up 7 per cent. The real cost of living, they argue, has risen much more than the index—mainly because the index does not fully reflect either deterioration in quality or above-ceiling prices.

The demand that wages should be increased to offset rises in the cost of living subsequent to May, 1942, is persuasive. How does one explain to a worker why his protection against higher

living costs does not go beyond May, 1942?

Despite this shortcoming of the "Little Steel" formula, a large proportion of workers have no real cause to find fault with it. More than half of the factory workers are paid by the amount of their output under either piecework or bonus plans. Managements are constantly introducing improvements which make the same rates yield earnings with no more exertion by workers—often with less exertion. Consequently, straight-time hourly earnings of nearly all piece or bonus workers have risen far faster than the cost of living. Among factory workers as a whole, straight-time hourly earnings (corrected for shifts of men from low-paying into high-paying industries) rose 27.7 per cent between January, 1941, and July, 1943, in comparison with a rise in the cost of living of only 22.5 per cent. The advance in straight-time hourly earnings of pieceworkers has probably exceeded 35 per cent; that of time workers has been little more than 20 per cent.

It is not true that the cost-of-living index fails to reflect above-ceiling prices. However, the index does fail to reflect fully the drop in the quality of goods—but this is a cost of war which everyone shares.

Incidentally, most discussions of changes in the cost of living overlook an important respect in which living costs have gone down: i.e., the fact that the average worker now has fewer dependents. In 1940, there was 1.4 dependents per worker; at present, there are 1.1 dependents.

Although the "Little Steel" formula seems to have worked out with substantial fairness to perhaps half the

workers, some revision is badly needed. The practice of adjusting wages to meet changes in the cost of living should not stop with May, 1942, but should be carried down to date, and new adjustments should be made at reasonable intervals.

Would not this change inevitably produce an inflationary spiral? Not if the connection between the cost of living and wages is based upon straight-time hourly *earnings* rather than upon wage rates.

A modification should be made in the "Little Steel" formula to eliminate the gross injustice which it imposes on time workers. It is only fair that time workers be counted as a separate group in ascertaining whether straight-time hourly earnings have risen as much as the cost of living.

Inexcusable is the government's policy, embodied in the Smith-Connally Act, of conducting strike votes in war plants. As the fighting becomes grimmer and the casualty lists grow longer, deliberate votes on whether to stop work in an airplane or an ordnance plant will become less and less tolerable.

The Smith-Connally Act should be repealed, and without delay. What else should be done? A general prohibition against strikes is not the answer. Revision of the "Little Steel" formula is essential because it would help to remove the sense of injustice from which many workers now smart.

The government should stop the practice of offering concessions to men who are on strike. The instigation or support of strikes against government boards or of strikes to compel employers to violate the government's wage stabilization policy should be penalized. This means that taking strike votes, maintaining picket lines, holding strike rallies, and paying strike benefits would all be punishable.

Let Congress in repealing the Smith-Connally Act create a "Board for Enforcing the Nation's No-Strike Policy." Let it be a small board of six or nine, composed solely of labor leaders, with two or three each from the A. F. of L., the C.I.O., and the railroad unions, appointed by the President. Let it have the sole responsibility of getting men back to work in the few hard cases where they strike against an order of the WLB or other similar agency, or where they refuse to accept arbitration. Such a board should have authority to deprive strike leaders of seniority rights, to take over a local, to deprive a local of its bargaining rights.

What does the labor situation boil down to? Despite the rise in days lost from strikes, despite the bad example of some unions, American labor as a whole does not intend to abandon its no-strike policy. The greatest danger to labor is from the present timid and vacillating policy of the government. BY SUMNER H. SLICHTER. *The Atlantic Monthly*, February, 1944, p. 37:5.

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- THE PENNSYLVANIA SALT MANUFACTURING CO. has turned over its postwar planning to men under 35 on the theory that their plans will be more daring and imaginative and that the younger men will have to execute them anyway.

—Newsweek

Postwar Executive Talent

FROM what sources may executives be secured in the postwar period?

This question is one of keen interest among business men, but it is far easier to apply thoughts in connection with it to a specific business than to industry generally. Accordingly, in attempting to answer it, I shall speak for the particular company with which I am connected.*

As I see it, there will be four principal sources of postwar executive talent:

1. Each business has a large proportion of its men in the armed services. From the parent organization of my company it is almost 30 per cent, and of this group one-fourth are officers. We expect a number of our future executives to be drawn from this source. From personal contacts and correspondence with many of these men I have observed a rapid growth in their leadership qualities. Many of them are gaining in a brief period a type of administrative experience that industry could not possibly give them. For example, one of our young salesmen came to see me a few weeks ago, and I was amazed to discover that he is already a major on the headquarters staff in one of the Corps areas. He is now only 26 years of age. Certainly, such a man is promising executive material for the postwar period. "The University of Hard Knocks," especially if it is war, is an expensive and dangerous way to obtain experience, but it does develop men.

2. The men in business on the home front have had to grapple with some of

the toughest problems of their careers, especially in manufacturing and general administration. Almost every conceivable difficulty has arisen, including labor turnover, absenteeism, lack of materials, and a multitude of government rules and regulations. The solving of these problems has made them more resourceful, taught them that the word "impossible" belonged to the prewar era, and has compressed into a short span the managerial experience of a lifetime. From these resourceful men we should also secure a number of postwar executives. My company's policy is to make promotions from the ranks whenever possible.

3. If history repeats itself, there will be available a large number of high-type executives temporarily out of employment and available during the transition from war to peacetime production. From this group we shall be interested primarily in men with technical backgrounds, as, for example, physics, chemistry, engineering, etc., as well as men with research experience, who will be willing to accept junior executive positions to start. Only rarely do we bring in a senior executive from the outside.

4. We expect to continue our successful policy of recruiting from schools and colleges as many outstanding graduates as we can assimilate and assigning them to the various functions of the business. The most promising of this group we rotate from function to function and place in small groups for special training. For several years they have been one of our best sources of junior executive material.

In normal times our personnel man-

* Scott Paper Company, Chester, Penna.

ager canvasses numerous colleges and universities for the special types of men he has in mind. If he is seeking engineers and desires to have one or more potential executives in the group, he will try to select them from different colleges and various sections of the country. In this way we gain the advantage of many diversified viewpoints and individual approaches to our problems. High scholastic standing is a more important quality in engineers, accountants and research executives than in sales, personnel or factory operating executives. The former work largely with facts, figures, test tubes and slide rules, while the latter deal primarily with people. In choosing executives from either group, we gladly accept those with average scholarship if the "human qualities" have been highly developed. Primarily, we are looking for men with broad human understanding, a thirst for general knowledge, ability to write intelligent and interesting reports, and, finally, demonstrated ability to talk well and influence others. Unless they have these characteristics, they are not the best executive material.

The four sources mentioned will offer industry the widest range of executive talent that it has ever enjoyed. Both the men in service and those on the home front will at the end of hostilities constitute the largest group of practically trained men that this country has ever seen. The sudden impact of this group will pose several problems for industry and for educational institutions. Many businesses will have a surplus of potential executives—those now on the home front plus the returning servicemen.

The servicemen will raise interesting problems, as, for example, the accountant, salesman or factory worker who by sheer ability has advanced to be a captain or major in the Army. Will we place him in his former modest position when he returns? Generally speaking, I think not, because he will have developed valuable qualities of leadership. The question is, can we absorb all this excellent potential executive material?

If we cannot, how will this affect recruiting from educational institutions? It might be well for industry and the educational institutions to discuss together a program covering:

1. Placement of graduates for the first year or two of postwar.

2. Graduate study for the surplus potential executive material, drawing some from ex-servicemen and some from the home front.

3. Types of curricula best suited to prepare the undergraduate and graduate students for executive positions in industry.

Incidentally, I consider it desirable for college men who expect to enter industry to be exposed in some form to the industrial environment during their undergraduate days. By exposure I mean the opportunity for the student to fill a position during vacation periods in a factory, office or even a retail store, and, by actual contact with selling, advertising, accounting or plant operations, to become acquainted with the job and thus determine if it appeals to him. BY THOMAS B. McCABE. *Advanced Management*, Section I, October-December, 1943, p. 133:4.

Back the Attack!—Buy War Bonds

What American Labor Wants

FROM the findings of a great variety of questionnaire surveys of employee attitudes conducted almost continuously since 1933, it is fair to assert that the American workman wants, first of all, *security*. Three times as many workmen believe that guaranteed annual wages are "important" as those who believe that a voice for labor in management is "important." "Steady employment" is a paramount consideration to 10 times as many workers as is high pay, and to 25 times as many as is "short hours."

The second demand of labor is a chance to advance—just the good old American chance to get on in the world, to go from one job to the next higher job. Twice as many factory workers rate an opportunity for promotion as important as those that want to safeguard seniority rights; there are four times as many who want that chance to rise as there are who want compulsory union membership.

In the list of things desired by the vast majority of American labor, the

third is rather an intangible one but extremely important notwithstanding. It shows up in dozens of specific complaints and demands, all of which may be summed up under the general head of "being treated like human beings." The forms that this inner feeling takes often seem trivial: a desire for toilets as clean as the boss', a decent period for eating lunch, foremen who don't swear at their men, a friendliness in the plant that preserves the identity of Jim or Charley and doesn't turn him into number 3098 on a cold-blooded payroll.

Fourth on the list is a desire for simple, genuine human dignity. At first blush this might seem to belong in the preceding category, but there is a vital difference that merits separate consideration. This desire for human dignity, summed up, means that most workers want to feel that they are personally performing creditably in a job which contributes something to the aggregate of human security, advancement or happiness. BY ELMO ROPER. *The American Mercury*, February, 1944, p. 180:5.

Industry Watches the Skies

IT is a foregone conclusion that postwar industry will benefit in many ways from improved weather forecasting services offered by the U. S. Weather Bureau and private organizations. Longer-range forecasts, based on current information rather than previous experience, are in prospect. And what is just as important to countless businesses, there will be forecasts of a specialized character to answer specific needs or specific requests. Moreover, the information will go into far more detail than heretofore, taking in humidity and other factors, generally regarded in the past as secondary to temperature, precipitation, electrical storms, etc.

That industry is aware of the value of specialized weather forecasts is apparent from the findings of a recent survey on the subject. While only one of every six companies responding reported that the U. S. Weather Bureau now is supplying it with specialized weather service, four out of five of the concerns said they would subscribe to the forecasts and reports of a private meteorological service. Slightly less than one-third reported interest in receiving climatological reports and forecasts based

on normals for specified periods. Seventy per cent said they wanted a service providing forecasts of the weather 6, 12, 24 and 48 hours in advance, and 50 per cent wanted five- to seven-day forecasts.

Incidentally, a number of "quack" weather forecasting organizations are said to be in operation in the Midwest and other parts of the country, and a surprising number of business concerns have subscribed for reports that have no basis in scientific facts. It would be well for business executives to check with a local section of the American Meteorological Society, if one exists, or with the local Weather Bureau before subscribing to weather forecasting services.

—E. N. MOORE in *Commerce* 2/44

Management Presents Its Case

IN an effort to acquaint employees better with management problems, on both plant and national scales, the War Production Board of Carrier Corporation, Syracuse, N. Y., has launched an ambitious educational program under the name of the Carrier Institute of Business.

The Institute is currently conducting a series of 14 weekly lectures, followed by discussion groups and brief 20-question true-and-false examinations. The tests are used to evaluate the alertness of employee-students and to determine points of discussion which have not been adequately clarified by lecturers.

Enrollment is limited to 105 employees, a percentage of the total employment of the entire plant applied to each department. More than 300 applications were received, and enrollments were accepted on an iron-clad "first come, first served" basis. The students, all below supervisory rank, represent a complete cross-section of the plant personnel. The Institute was proposed by employee members of the plant War Production Board and is governed by an employee board of managers.

Lecture and discussion subjects include principles of the free enterprise system, management's functions in American business, history of Carrier, relationships between government and free enterprise, financing, marketing, production problems, foreign trade opportunities, postwar plans, and labor relations. Speakers include company officials and outside authorities.

—*Modern Industry* 10/15/43

Working Girl's Nirvana

ARE your employees' nerves frazzled? Does your staff snarl and snap at the customers? Do they climb into each other's hair? If so, try silence rooms.

That's the recommendation of one of Washington's large department stores. Woodward & Lothrop's has found that employee relationships are smoothed by setting up one room for women workers, another for men, where nothing is permitted but silence—absolute silence. No talking, no reading, no smoking, no card playing, no munching crispy, crunchy candy bars.

On the theory that the best way to rest ears, tongue and mind is to rest the feet, the sole equipment of the women's silence salon is 50 double-decker beds. (The men's silence room, which is used much less, has only five cots.) There are no chairs, and "just enough light to find your way around." The rooms are especially busy between 11:30 and 3:30, when employees have their staggered one-hour lunch periods.

—*The Wall Street Journal* 2/14/44

• AN ANALYSIS of salaries paid heads of 200 of the largest corporations in the United States, made by Professor R. A. Gordon, of the University of California, establishes the average at the time of the survey (1943) at \$61,000. Income from dividends from stock holdings by this same group averaged about \$500. This indicates most large corporation managers are professional managers rather than owner-managers.

—The Dartnell Corporation

Office Management

Scheduling Office Work

WHAT types of office work can be effectively scheduled? While this is, to some extent, a matter of individual determination in each office, there appears to be a high degree of consistency in opinion on this question. Among the types of work which many office managers are now scheduling may be included machine posting, billing, key punching, tabulating, filing, transcribing, payroll, checkwriting for accounts payable, circular mailing, preparation of periodical reports, statistical work, order writing, month-end and other closings, budget distributions, inventory taking, etc. One office manager tells the writer: "I did not believe that any particular amount of work in my office could be scheduled until I started to explore the possibilities. Much to my surprise, I find that at least 75 per cent of the total volume of work in our office is subject to reasonably exact scheduling."

Responsibility for constructing work schedules must be fixed, but whether to delegate this responsibility to the planning unit, the work supervisor, or a schedule clerk reporting to the office manager, must be determined in the light of specific circumstances. In deciding this question it must be kept foremost in mind that the office justifies its existence on the basis of the service which it renders and that good performance cannot be expected where others assume the responsibilities of the supervisors. This concept does not abrogate the principle of specialization, nor does it imply any less value of functional staff service.

In other words, if the scheduling job complicates the supervisors' responsibilities too much, it should be done for them.

Among the preliminaries that must be completed before actual work scheduling begins may be mentioned:

1. The construction of performance standards. Many offices are now using the time study or micromotion method for the construction of work standards. Most offices, however, still make adjusted experience the basis for standards.

2. The analysis of routines. The purposes of this analysis are to check the routine, to determine its effectiveness, to simplify methods, to regularize the work flow, to eliminate bottlenecks, and to determine volume, frequency, time requirements in terms of finished work and other departmental tie-ups.

3. The evaluation of work tools and facilities. By implication, this point was covered in No. 2 above but is repeated for emphasis.

4. The evaluation of personnel. It is important to know the qualities of the available workers as well as the number. Their present responsibilities must also be clearly known, as well as what other duties and responsibilities they are competent to and can be expected to assume in the event of necessity. It is of the utmost importance, also, that workers be informed as to the nature and purpose of work scheduling and that they understand thoroughly its importance to them and to the company.

The principal steps to be followed in scheduling are given below (the final four steps suggested are really collateral issues that aid in making scheduling effective):

1. Clearly define the authority and

the formal and cooperative responsibility of each worker and supervisor. Workers are much more likely to cooperate when they have been shown the possible ways and effects of cooperation.

2. List each specific type of work that is to be scheduled.

3. Classify all work to be scheduled according to time frequency, i.e.:

- a. regular—daily, weekly, monthly, etc.
- b. intermittent—recurring with some regularity and with the same characteristics.
- c. sporadic—varying characteristics, scattered recurrence.

4. Determine, insofar as possible, the average daily volume and the seasonal high and low volumes for each class of work.

5. Determine the time value of each type of work. Work priority should be established on the basis of the completion time value of each kind of work.

6. Assign performance time for each unit of work. This will be based on the performance standards already established.

7. Make work assignments, and then check to be sure they are correct. This should bring about equalization of the work load and proper utilization of facilities.

8. Prepare schedule sheets, or boards, by types of work, sequences, starting and completion times, and by job titles and workers, if desired.

9. Allow flexibility in schedules to permit absorption of irregularities due to work flow or workers.

NOTE: This can be done to some extent by drawing additional workers from a pool when volume is extra large, doubling up during vacations, absences, etc., and timing certain work which can be delayed so that it can be performed as fill-in.

10. Arrange for the measurement of work. A record of work may be kept by each employee, or one or more clerks may be assigned to keep performance records for all workers.

11. Record, at sufficiently frequent intervals to give adequate control, the amount of work received, the amount finished, the amount remaining to be

completed, and the amount behind schedule.

12. Introduce a report system that will quickly focus supervisory and executive attention on trouble spots and which will provide basic information with reference to volume of work, performance of workers in relation to standards, cyclical changes in volume, changes in time value, lack of integration in collateral or supplementary routines, and extent of manpower and equipment utilization.

13. Review clerical routines, work methods and work facilities periodically.

14. Adjust standards and schedules on the basis of data gathered through items 10, 11, 12 and 13.

15. Do not rely on work schedules to reduce the need for good supervision, adequate compensation, and satisfactory employee relations.

When the information called for in those steps is at hand, it is a relatively simple matter to construct the schedule sheet. Obviously, a decision must be made as to whether scheduling will be on an over-all basis for the total routine or on a sequence basis for each operation involved. It is customary to start the calculations with the desired completion date and to work backwards to establish the date upon which work should be commenced.

In scheduling work in an order routine, the first step is to fix the policy covering order handling. If orders received up to 1 o'clock each day are to be completed before the close of business that day, the schedule sheet will be built up on the basis of expected volume of orders and clerical minutes per order required. BY COLEMAN L. MAZE. *NOMA Forum*, February, 1944, p. 11:12.

(This paper also includes practical illustrations of scheduling, and describes several scheduling devices in detail.—Ed.)

Motion Pictures Teach Office Economy

RALSTON Purina Company has produced a motion picture to show clerical employees how to work more comfortably and with less lost motion. Packed with brief hints to better, easier, faster work, the film is an eye-opener to most office executives who see it.

For example, most executives have watched people laboriously attach gummed cloth reinforcements to holes in sheets to be used in ring binders. Usual way is to take one reinforcement at a time, moisten it, clumsily place reinforcement over the hole. This is slow, inaccurate, tedious. Better way is to drop gummed reinforcements on wet sponge. About half will automatically fall gummed side down. Quickly reverse those which fall with gummed side up. Then with both hands attach the reinforcements. But first—and this is most important—prepare a jig, consisting of upright rods, size of holes. Place paper in this jig. Then it's fast and easy to attach the gummed reinforcements.

Two-Hand Gathering: Much time is lost in the average office gathering or collating papers for mailing. For example, a two-page circular letter, a letter and price-change sheet, a two-page bulletin. Usual way is to lay two piles of paper near each other, pick up one, then the other, then place the two gathered sheets in a third pile. Better way is, with the use of a cardboard gadget, to gather two sheets with right hand, hold envelopes open with the left hand. The cardboard gadget is prepared in this

way: Take a piece of cardboard about four inches wide, 12 inches long. Score it three times—once in the exact center, once at four inches, once at eight inches. Fold on center score, then at other two scores. Push ends together, so that a triangle is formed between the three score marks. Attach ends to table or desk top with Scotch tape. Then place the two sheets to be gathered in a position convenient to the operator's right hand. One pile of paper goes on one side of the triangle, another on the other side. With rubber finger tips it is easy to reach great speed in gathering the two sheets by pulling them up over this triangle.

Addressing Technique for Envelopes:

For rapid addressing, insert one envelope in the typewriter, address it, roll it out backward until about one inch or an inch and one-half is visible at the front of the roller. Insert the next envelope underneath the first one, continue the backward roll of the platen until the second envelope is in position for addressing. Repeat the backward roll each time, inserting each new envelope underneath its predecessor. Through shortcuts such as this, supplemented by proper training in motion economy, daily output of clerical workers can be boosted substantially.

The picture has become so popular that Ralston has been forced to have a few extra prints made, which it will rent for a small fee to other companies.

American Business, October, 1943, p. 38:2.

Back the Attack!—Buy War Bonds

Common Typing Errors

OFFICE production can be increased substantially with higher typewriter desks, better chairs, and brief instructions to teach operators correct posture and technique. The following common typing errors cost business millions of dollars annually:

1. Typists use too much hand, wrist and arm motion.
2. Typists lift hands too high off keyboard.
3. Typists sit too far to the left.
4. Typists hook feet into chair legs or "spider" (feet should be flat on floor).
5. Typists lean forward from waist, increasing fatigue.
6. Typists do not sit back in chair to support themselves properly against the chair back.
7. Typists "slouch." Easier way is to sit erect, with neck and back straight.
8. Typewriter desks are too low. The typewriter should be 27 or 28 inches off floor. In many offices typewriters are but 26 inches off floor.
9. Typists, in an effort to prevent fatigue, sit on feet or assume other unnatural postures, increasing the fatigue they try to avoid.
10. Typists attempt to watch keyboard instead of copy.

—ALBERT TANGORA in *American Business* 11/43

• **PAPER SAVER:** Carbon copies of letters use up paper and filing space. For the same letter to several persons one copy only need be made, with the names of the other addressees listed.

—*Canadian Business* 2/44

• **WHITE-COLLAR UNIONS:** In 1942, 145 local unions of clerical workers comprised the membership of the International Council of Office Employees' Unions (A. F. of L.), but last year the Council's membership jumped to 175. The locals are spread throughout the United States, Canada, and the Hawaiian Islands, and many of them are in war industries. Dues-paying membership of these white-collar unions has more than doubled since 1942.

—J. H. HICKS and PAUL R. HUTCHINGS in *American Federationist* 12/44

Bill-Paying and Banking Service

TAKING time off to pay bills and make bank deposits is an absenteeism factor that can be cut by a relatively simple procedure. The Wallace & Tiernan Co., of Belleville, N. J., has done it by establishing a bill-paying and banking service.

The new system was set up after the plant's War Efforts Committee found that in many cases workers stayed out for part of a day or an entire day because they had no checking accounts, would not be bothered with them, and had to trek all over town to settle up for gas and electricity, water, groceries, rent, etc.

Now, instead of doing that, Wallace & Tiernan workers simply take their money and bills to an employee of the personnel department who makes out a check and mails it. Those with bank deposits to be made give the money to the service officer, who in turn sends the bank a check. There is no charge to workers for the accommodations, and company officials have found the response excellent. Fear that workers might hesitate to use the service was unfounded. Matters are treated confidentially, and further, there seems to be little reason for fear of embarrassment, since, with wages high, work plentiful, and the many limitations on spending, few are running up bills that might make for ear-reddening should they be seen by "the company."

—L. T. BOLGER in *Mill & Factory* 11/43

Personnel

Upgrading—for Better Manpower Utilization

A carefully planned upgrading system under which *all* talents of employees are thoroughly classified and promptly utilized when needed has enabled the Denver Ordnance Plant, operated by the Remington Arms Company, to fill many important jobs that would otherwise be hard to fill, and at the same time has raised worker morale to an unusually high level.

There are no "blind alley" jobs in the Denver plant. No employee is penalized because he is doing an especially good job in a minor position or because his department has failed to expand while others were expanding. Likewise, the fact that he accepts a job in some line other than his chosen one does not slow his progress. When better jobs open up, every qualified man—wherever he is working—receives impartial consideration. The plant averages between 300 and 700 transfers a week, all of which represent promotions for old employees.

For example, should the company lose a good office-machine man, it would be almost impossible to replace him from the outside. But study of the cross-reference file in the personnel department would reveal at least five men with 10 to 20 years' experience in this line, not to mention one man on the guard force who had 30 years' experience. Since it would be much easier to replace the guard than to find a competent mechanic, he would be transferred.

To facilitate transfers, four separate employee record files are maintained—

an alphabetical file, a rate classification file, a departmental file, and an alternate occupational file. The alphabetical file carries routine information, such as name, job title, class, building in which worker is employed, service date, age and sex. The rate card duplicates this information and in addition lists education, social security number, and occupational abilities. The departmental files duplicate the rate classification files but are kept in service record order; notations on individual performance also are appended from time to time by the area supervisor. The alternate occupational files, which are centralized, list alternate skills according to type by service dates. For instance, names of all men on other jobs who have qualifying experience as carpenters are filed together according to service age.

When an opening occurs in any department, the personnel organization obtains from the files a list of all individuals who, on the basis of past experience and qualifications, would seem eligible. The names on this list are then discussed with area supervisors to determine current performance records. Where several men have all made excellent work records and are highly recommended by their supervisors, the choice is based on service record.

Great care is taken to see that department heads are satisfied with transfers and that transferred workers fully understand the responsibilities of their new jobs. Plant interviewing procedure has been developed to cover these points.

When an employee has been selected for possible transfer, the employment office interviewer first gets in touch with the man's supervisor and suggests that they examine his departmental file card. The decision as to actual eligibility is based on the employee's record plus the supervisor's comments.

If the prospect is well recommended, he is called in for a conference and told that his supervisor has recommended him for promotion—the part of supervision is always emphasized. If the employee is interested in the proposed transfer, he is given a careful outline of the nature of the job, the working conditions, the rate progression involved, the hours, and other advantages and disadvantages. Where a person is transferred from one area to another, the new supervisor involved is not only given an advance opportunity to check over the man's record and to talk to his old supervisor, but he also meets the new man before the actual transfer.

Except where interests of the war effort demand such action—and in every case it must be approved by management—the hiring of new personnel is limited to the lower wage classifications, the upper bracket jobs being retained for old employees. With the aid of the alternate occupational files and a series of unusual job relations charts, this company

is able to fill promptly, fairly and efficiently a majority of the openings that become available.

Much upgrading must be done on an intradepartmental basis—in relation to actual plant experience of workers. It is in planning for these promotions that the job relations charts become valuable. The charts outline logical work relationships and show how employees on jobs having lower classifications are to be considered for promotion in their own lines.

Under this setup, all positions are classified in 17 different alphabetically named groups. These groups, in turn, are subdivided into a number of related divisions, each containing its own list of jobs in order of their rate value.

With strictly non-skilled jobs, persons in the first five classifications below the one in which the vacancy occurs are all entitled to consideration on the basis of service record and performance, the service record being the deciding factor where other things are equal. In the semi-skilled brackets, employees desiring to do so may take special training that will fit them for advancement. In the highly skilled occupations, however, direct qualifying experience, either in the department or in previous work, is required. *Factory Management and Maintenance*, January, 1944, p. 94:3.

Wages and Living Costs in Two Wars

ACCORDING to the Bureau of Labor Statistics, average weekly earnings in manufacturing industries rose from \$23.60 in June, 1939, to \$42.76 in July, 1943—an increase of 81.2 per cent. In a corresponding period in World War I, average wages went up from \$11.62 to \$20.02 per week, an increase of 72.3 per cent. Living costs have not risen so rapidly during World War II as they did in World War I. Buying power of average weekly earnings increased 44.3 per cent between June, 1939, and July, 1943, as compared with an increase of only 13.5 per cent from June, 1914, through July, 1918, in the First World War period.

—GLENN GARDINER in *Management Information*

Wartime Pay of Women in Industry

THROUGH an analysis of practices of a cross section of companies employing women for work comparable to that done by men, the Conference Board has sought a measure of the extent to which the equal-pay-for-equal-work policy has been adopted.

The 155 companies providing information for the survey were chiefly those in what is known as "heavy industry," which before the war had employed few, if any, women. More than 50 per cent of the women, in nearly three-fourths of the plants surveyed, were doing work comparable to men's by April, 1943.

The starting rates paid workers who are eventually to be placed on skilled operations comprise the category considered. Companies term these mechanical helpers, probationers, trainees, apprentices or learners, as contrasted with common laborers, who not infrequently command at the outset a rate more nearly approximating the maximum for their job classification.

The entrance rates paid women employed for men's jobs were compared with the hiring rates on women's jobs in those companies which, previous to the introduction of women on men's jobs or their placement on work comparable to that done by men, had employed women on "women's jobs" and continued to do so.

The starting rates for men range from 40 cents an hour to \$1.00 an hour, the lowest being paid in Virginia, the highest in Detroit, Michigan. Sixty cents an hour is paid by more plants than any other beginning rate, with 65 cents paid by the next largest group of plants.

Only one plant, a metal products factory in Wisconsin, pays less than 40 cents an hour as a starting rate to women who are employed to replace men or to do work similar to men's. The highest entrance rate, \$1.00 an hour, is paid by a Detroit plant which also pays that rate to unskilled male trainees. Sixty cents an hour is paid by the largest group of plants, but not so many plants pay such a high rate as in the case of male workers. The number of plants paying women 50 cents an hour as a starting rate is almost equal to the number which pay 60 cents an hour. The number of plants paying starting rates ranging from 50 cents to 54 cents outnumber those which pay 60 cents to 64 cents.

While the starting rates for women who are to be placed on women's jobs were reported as high as 90 cents (in Detroit), the largest group of plants surveyed pay a starting rate of 50 cents, with the next largest group paying 60 cents. The entrance rates paid women who are to do work comparable to that done by men are, therefore, on the whole higher than those paid women who are employed for women's jobs, but not as high in all instances as those paid men.

A study of the differentials paid women workers in the individual plants presents a more exact picture of this situation. The variations in hourly entrance rates paid to men and to women on men's jobs occur in less than half of the plants surveyed. In 52.1 per cent of the 148 plants which provided information on both the starting rates paid men and the starting rates paid inex-

perienced women who are to be placed on men's jobs, the starting rates for the two classes of workers are identical. As measured by starting rates paid unskilled workers, these plants are adhering strictly to the policy of equal pay for equal work. Divergence from this, however, is as much as 26½ cents an hour.

Of the 148 plants which provided information on starting rates in the survey, 92, or 62.1 per cent, reported that they had plans for automatic increases—in other words, automatic progression of wage rates from the starting rate to the base rate. Of this number, 59 pay the same starting rates to men and to women who are to do men's work. Fifty-three of the plants which pay identical starting rates to men and women advance the workers at the same intervals and the same amounts, so that when the base rate is reached they are still receiving identical rates of pay. In three plants in which the starting rates are the same, there is provision for advancing men automatically, but no such plan for women. In three other plants, while the starting rates are identical in the case of men and women, there is a differential in favor of the men by the time the automatic progression period has ended.

Of the 33 plants with automatic progression plans which start men and women at different rates, in 10 the differentials remain the same at the end of the progression periods as they were at the beginning; in nine plants the differentials have become greater; but in 14 plants the differentials have been reduced, in three cases disappearing entirely.

The length of the periods for automatic increases from starting to base rates varies from two weeks to three

years (an apprenticeship course). Three months is the period provided in the plans of the largest number of plants, with the six-month period next in frequency. While there are many variations, the progression in five-cent steps is most usual.

A little more than a fourth of the jobs named as the highest skilled production jobs filled by women paid from 70 cents to 79 cents an hour. Almost a fifth paid rates ranging from 80 cents to 89 cents. More than a tenth paid 90 cents to 99 cents, and nearly a fourth paid \$1.00 or over.

Executives of the plants cooperating in the survey were asked whether they had a plan for upgrading women higher than the jobs which they listed as the highest skilled production jobs held by women workers or the equivalent of these jobs. Of the 131 executives who supplied an answer, 54 reported that their companies planned to upgrade women further, while 77 replied that they had no plan for further advancing women workers.

Incidentally, half of the plants which supplied information for the study have regularly scheduled rest periods on one or more shifts for their women workers who are replacing men or doing comparable work. Almost one-third of the plants are also giving rest periods to men (which may indicate that the allowance stems from convictions of benefit to be derived from the practice, regardless of the sex of the worker). A 10-minute period is given by the largest number of plants which have regularly scheduled periods, and two pauses during a shift are the usual arrangement. *The Conference Board Management Record*, October, 1943, p. 402:4.

Planning for Postwar Placement

IN general, from the viewpoint of industrial placement, the men who will return from military service can be divided into three groups:

(1) The first includes men who want to and are physically qualified to go back to their old jobs. This group will include both men who have not acquired any new skills in the military services and others who, despite the acquisition of new skills, will prefer their old jobs. According to one report, approximately one-half of the men discharged from military service to date have requested reinstatement in their old jobs.

(2) The second group will consist of men who have received technical training or whose war experience has been such as to create dissatisfaction with the jobs held before entering military service and an expectation of placement in better or more responsible jobs. This group will include the office boy who has been piloting a four-motor bomber; the mechanic's helper who has acquired the rating of technical sergeant and has been responsible for the repair of bombsights; the engineering cadet who has become a commissioned officer and a radar expert. Many of these will expect industry at least to make an effort to provide jobs on which they can use their newly acquired skills and experience.

(3) The third group includes the physically disabled. Observations made by placement agencies reveal that fairly widespread objection still exists to the employment of disabled individuals, with little regard for their true capabilities. Employers must share responsibility for placement of the handicapped on the

basis of the capabilities of such individuals.

In general, three steps can be taken immediately by any company that desires to prepare in advance for the placement of employees returning from military service:

(1) The preliminary step is to survey the company's occupational picture in order to spot those jobs which can most readily be made available to men returning from the services. This step should not be postponed until the war ends; it can be started today, continued tomorrow, and carried on as a dynamic activity throughout the period of postwar readjustment. In passing, it may be noted that plant running and replacement tables, originally designed to facilitate the transfer of men from industry to the military services, can be used to advantage in selecting available jobs; in planning training programs; in picking jobs for re-engineering in line with placement programs, and those in which the physically handicapped can be used.

(2) The second step is to organize a plan for the occupational counseling of men returning from military service. Plans are already being made for such counseling by the Army, Navy, Selective Service System, and other government agencies concerned with the return of veterans to civilian life. It is suggested, however, that here again the job can best be done on a plant or company basis.

In such counseling, the usual personnel techniques of the interview, possibly the psychological test, and achievement trade tests will be used. Specialists in

the field of vocational guidance and vocational rehabilitation may be called upon to help set up and administer the occupational counseling program and such a program of training as may be needed to supplement occupational counseling.

It is not possible to outline here in detail the steps to be taken in organizing and administering this occupational counseling program. It is, however, possible to refer to one or two newly developed special aids which can be used to advantage in this process. Striking examples of such material are to be found in a volume entitled *Special Aids for Placing Army Personnel in Civilian Jobs*¹ and in a parallel volume covering the placement of Navy personnel in civilian jobs developed by the Division of Occupational Analysis and Manning Tables of the War Manpower Commission.² The information given in these publications is designed first to facilitate the maximum utilization in civilian jobs of an individual's occupational experience in the Army and Navy and, secondly, to promote the effective utilization of the abilities and skills of those

discharged with physical handicaps. Incidentally, five of seven Army jobs are said to have some counterparts in civilian industry.

The material to which reference has been made represents only some of the tools which are available for use by those responsible for occupational counseling of veterans in individual plants. Lists of occupational families, showing groups of occupations in industries which resemble each other from the viewpoint of the duties performed and of the characteristics required of the worker, represent additional information available to those who will have the responsibility for placing ex-servicemen.

(3) While occupational counseling is the basic step, no plan for the placement of men returning from military service will be complete without provisions for such training as will be necessary to help adjust the man to the job selected for him. This will involve both *refresher* type of training for men returning to their old jobs, and indoctrination, supplemented in some instances by more extensive training, for men who are assigned to new jobs.

BY MORRIS S. VITELES. *Edison Electric Institute Bulletin*, January, 1944, p. 15:4.

Facilitating Payroll Deductions

NASH-KELVINATOR has given its employees some idea of what they are saving for in the postwar period, and beyond, in a booklet, "Your Hidden Treasure." Its purpose is to inform the employee on what happens to the sums deducted from his paychecks—how much for war bonds, and what that will mean in the future; how much for victory tax, and how much return he gets; how much for social security, and the provisions for repaying it; how much for hospitalization and group insurance, and what he gets for that money.

A series of forms in the text provides space for the employee to keep a record of his "Hidden Treasure."

—C.E.D. News

Experiment in Rehabilitation

CATERPILLAR Tractor Company, Peoria, Ill., has an 18-month head start on the veterans' rehabilitation problem.

With 5,000 stars in its service flag, Caterpillar reasoned that it would some day face a rehabilitation task of real proportions. So, in mid-1942, it began to recruit large numbers of handicapped civilians, more than 800 in all.

Induction and training procedures thus developed will enable the company to greet its disabled veterans with a tested, well-coordinated program for their swift return to self-sustaining civilian life.

First step was a department-by-department survey in which supervisors were asked to list the minimum physical requirements of each job. This revealed that there were 1,000 distinct jobs in the company's plants. The personnel de-

partment was then instructed not to reject any applicant on physical grounds since, among the company's 1,000 jobs, there must be one the applicant could fill, no matter what his handicap.

Caterpillar writes a stringent definition of "handicap," by the way. It excludes hernia, hay fever, missing fingers, slightly defective vision, and so forth, and includes only such pronounced disabilities as missing limbs, marked deformities, loss of one or both eyes, loss of hearing and speech, organic heart disease, and the like.

Steps in induction are: (1) initial interview, (2) job assignment based on job analysis, (3) medical examination and approval of assignment, (4) training. Special instructions in the handling of the individual are prepared for the supervisors by the medical and personnel departments. Special safety instruc-

MATCHING HANDICAPS WITH JOBS

(Data from Three Cleveland Companies)

<i>Job</i>	<i>Handicap</i>	<i>Job</i>	<i>Handicap</i>
Auto Mechanic	*Weak Condition	Machine Operator	*Stomach Ulcers
Cold Roll Man	One Eye	Machine Operator	*Nervousness
Gateman	*Poor Vision	Machinist	Hand Injury
Guard	*Arm Injury	Machinist	One Eye
Guard	*Nervousness	Machinist	Hernia
Guard	One Eye	Oiler	*Hernia
Laborer	Sinus	Routine Tester	Eye Injury
Laborer	*Nervousness	Sweeper	Injured Back
Laborer	*Spinal Curvature	Sweeper	*Hip Injury
Machine Operator	*Poor Eyes	Time Checker	Heart Condition
Machine Operator	*Fallen Arches	Tool Crib Man	Foot Injury
Machine Operator	*Arthritis	Truck Driver	*Foot Injury
Machine Operator	Head Injury	Window Washer	Hernia
Machine Operator	*Fractured Skull	Window Washer	*Nervousness

* Veteran

(Reproduced from *Factory Management and Maintenance*, February, 1944)

tion to be given the employee has also been worked out.

The handling of recently handicapped persons, such as accident victims, has received special attention because of Caterpillar's desire to develop techniques for veterans' rehabilitation. For example, Lloyd Smith, who lost his arm in a hunting accident, now supports his wife and child as a clerk in the reclamation department. Arthur Russell, a stock chaser, makes more than double any amount he ever earned as a bookkeeper before he lost his hand in a motor crash.

Caterpillar's first and, to date, only disabled war veteran is Charles Craig, 26, whose left leg was all but blown off

by a Jap bomb at Pearl Harbor. On a bench job in the machine shop, he does a good day's work, though he must remain seated.

Dr. Harold A. Vonachen, company medical director, says: "Those suffering from nervous disorders on returning from military service will present a problem of some magnitude, but certainly many of these men will recover if we are able quickly to absorb them into an occupation that will convince them they are fully capable of caring for themselves and their dependents."

BY CHARLES B. COATES. *Factory Management and Maintenance*, February, 1944, p. 82:11.

Speeding Veterans to Jobs

PERSONNEL managers seeking to fill labor force gaps through the employment of veterans will have their task greatly expedited if recently launched experiments in placement of veterans are successful.

War Manpower Commission officials anticipate that by April 1 laboratory cities scattered over the country will have developed procedure to where the proposed system may be extended throughout the United States. Features of the new veterans' placement network will include central clearance for all workers and all jobs registered anywhere within the nation.

Before a discharged serviceman is listed as available for work, he will be offered the assistance of employment experts. His experience, handicaps if any, natural aptitude, and preference will be discussed in personal interviews, officials explain. When a trade has been chosen, he will be entered in national lists, along with a description of his skills, experience, and other pertinent data required by employers.

To bring manpower and industry together, to advise veterans on jobs utilizing their experience and aptitudes, and to settle them in positions of probable permanence, the War Manpower Commission, Army and Navy, Veterans' Administration, U. S. Employment Service, and other interested government agencies have been cooperating with the American Legion, the Veterans of Foreign Wars, and interested civilian groups in adopting plans for assisting veterans at the earliest possible moment.

At Fort Slocum, New York, the Army is experimenting with methods of employment counseling before discharge. In hospitals, representatives of the WMC are attempting to do the same. The avowed purpose is to give each veteran full information as to rehabilitation agencies and facilities at his disposal so that when he leaves the service he will be able immediately to find the type of work for which he is best fitted.

—The Journal of Commerce 1/25/44

Free Ads

WORKERS at one upstate New York plant who want to buy or sell merchandise, rent an apartment, hire a housekeeper, etc., may now insert their ads in the local newspaper at no expense. They simply leave their copy at the factory, and the company pays the cost. Each ad is run for three days.

—Forbes 2/1/44

Production Management

10-Point Plan Boosts Production

LATE in August, Buffalo Arms Corporation found that it needed 100,000 additional man-hours per month to get over the hump of a new production schedule demanded by government contracts. Yet the labor picture in Buffalo was desperately tight; and Buffalo Arms was already running on two 10-hour shifts, six days a week.

Faced with this condition, the management laid its cards on the table before the plant labor-management committee. The committee, in effect, took over. It drew up a 10-point plan to increase production, centered it upon an already-existing wage incentive plan—and in just three weeks, during which only one additional worker was taken on, had arms output up 25 per cent. At the same time, the increased efficiency of the plant cut the unit cost of many parts by as much as half.

Here is the 10-point program the committee drew up:

1. *Face the fact that there is an acute labor shortage; find the answer in better utilization of existing personnel.*

2. *Get more production out of everyone in the plant.*

Three-quarters of the corporation's clerical force (mostly women) now go out in the shops from two to four hours a day on completion of their regular hours. They get the job rate plus wage incentive.

An intensive "recruiting" drive by the labor-management committee brought them out. Move-men, inspectors, and workers from the receiving, shipping,

and similar departments have also been recruited for after-hours production.

3. *Increase departmental output and thus the wage incentive.*

Under the Buffalo Arms wage incentive plan, each production department builds up a daily efficiency rating from its own production standard established by time studies determining production costs. Efficiency in production departments had been around 129 per cent for six months before the emergency, but now the over-all plant figure is close to 150 per cent.

One big reason for the increase is the labor-management committee's effort to see that every worker knows the meaning of the efficiency rating and the progress of the 10-point program. Each of the 20-odd departments, for example, has its own efficiency blackboard, while bulletin boards throughout the plant carry a daily program message.

4. *Accept as cause for reduced productive standards only new methods that require expenditure of time for shifting, altering, or adding equipment.*

Such procedures as swinging machines around so that one worker can handle two or three are thus permitted in order to boost efficiency. Each department now has one or two instances of two-machined operation; there's one three-machines installation.

5. *Reduce absenteeism from present 5.6 per cent average to 3 per cent.*

Alongside each departmental efficiency board is the absenteeism board, showing the week's day-by-day failures in attend-

ance. A worker who hasn't missed a day of work for more than a year gets a membership card in the Perfect Attendance Club, while workers with full attendance for more than three months get a congratulatory letter and a High Score War Worker flag.

6. *Reduce turnover by conducting termination interviews and inviting skilled quits to return.*

Letters from the labor-management committee to those who quit work at the plant in the last five months stress wage-incentive pay and war production needs, as well as full reinstatement on the basis of recent pay-rate and seniority rights. When an employee says he plans to leave Buffalo Arms, a company counselor talks with him. If this fails, the labor-management committee joins in.

7. *Work Sundays only in weeks when 25 per cent gain in production can't be made in six days.*

8. *Cut scrap and salvage losses in half.*

Currently, the company's losses cost 26,000 man-hours per month. This, the labor-management committee believes,

should be turned into productive time by departmental criticism and constant publicity.

9. *Avoid time losses at starting, lunch periods, or other routine breaks.*

Time losses of this nature have been cut to bare minimum by stressing the value of minutes to the production schedule and to the size of the worker's paycheck.

10. *Voluntarily eliminate or postpone vacations.*

Employees now get their names on bulletin boards when they (at least temporarily) pass up the vacation due them. By this and such other means as special posters, both managers and workers are constantly reminded that, if employees with vacations due in the crisis period postpone them, production will gain 58,000 hours.

Average weekly paycheck for Buffalo Arms' men employees is now well over \$100, and repercussions are being felt elsewhere as employees in other companies take note of the program and the wage benefits at Buffalo Arms.

Modern Industry, October 15, 1943, p. 84:5.

Suggestion Systems in Britain

SINCE suggestion schemes were inaugurated 40 years ago in Royal Ordnance Factories, 20 per cent of all suggestions received have been put into operation. In the present war, states a Ministry of Supply report, the number of suggestions submitted has been equal to one for every 18 workers. Awards ranging from 10 shillings to £25—sometimes higher—have been paid for successful ideas. They are judged by committees which include workers' representatives, and experiments are conducted to test the ideas submitted.

—*Production and Engineering Bulletin* 1/44

GM's Suggestion Record

LATE returns from the employee-suggestion sector:

Since April, 1942, when the company's employee suggestion plan was expanded and strengthened, General Motors workers have been paid more than a million dollars for the 26,000-plus ideas that have been accepted.

—*Modern Industry* 1/15/44

Lessons of Wartime Inventory Control

MANY companies have been cramped by wartime inventory restrictions. They plan to enlarge their inventory as soon as restrictions are lifted or shortages disappear. On the other hand, some business executives are carefully appraising the possibility of continuing operations with smaller inventories. They point to the following areas of inventory analysis as sources of valuable data for future use:

1. A re-examination of the actual need to maintain the same ratio of inventory to turnover which in prewar days was accepted as normal. These executives feel that the type of control over inventory which wartime operation compelled may make possible a more effective utilization of limited inventory and a more profitable rate of turnover.

2. An examination of the causes for operating inefficiency which seems on the surface to be due to inventory controls. A number of companies have found that it is not a minimum inventory as such which causes operating inefficiency, but rather the uncertainty as to whether the inventory can be maintained at this level. Obviously, when present restrictions are removed, this uncertainty will end.

3. A cost analysis of the savings realized from the reduced inventory: (a) reduced working capital requirements; (b) savings in space and storage facilities; (c) reduction in personnel; (d) savings in cost of insurance, spoilage.

Incidentally, postwar developments in transportation will help companies get along with lower inventories. Plane transport will entirely change all notions about distance from suppliers. Rates are likely to be low. Rail transportation will be in better shape; and there will be vigorous competition from bus and truck carriers.

—*Your Business After the War*, Research Institute of America

Salvaging Stray Parts

THROUGH adoption of an unusual collection system, the Denver Ordnance Plant, operated by the Remington Arms Company, is saving around \$20,000 a month in parts that might otherwise be lost or discarded.

Manufacturing 30-cal. ammunition, the plant handles in various stages of manufacture millions of small parts per week. Thus it is inevitable that at times certain parts will be misrouted.

Instead of discarding these "misfits" as scrap, the Denver plant has developed a simple system for collecting them and returning them to the right place. Beside each press or other cartridge-making machine is a box marked "Strangers." When the machine operator finds something that does not belong to his department, he simply tosses it into the box. At the end of each shift, trucks are brought around to pick up the boxes.

The full boxes are taken to a central department, where their contents are sorted and redistributed, thus avoiding the scrapping of materials which have been partly processed and have merely gone astray.

—*LUCIUS FLINT in Factory Management and Maintenance 2/44*

SPRING PRODUCTION CONFERENCE

The Spring Production Conference of the American Management Association will be held on Wednesday and Thursday, April 19-20, at the Hotel Drake, Chicago.

Cost Control Through Operation Analysis

THE following examples may suffice to show the importance of "operation analysis" as a prerequisite to cost control:

Large assembly work is frequently marked by the crude use and application of hand tools. In assembling brackets to beams in one of the assembly departments of Westinghouse Electric & Manufacturing Company, the substitution of Yankee socket wrenches for common socket wrenches reduced the time required to perform this operation to one-half.

Whenever the quantity warrants, continual thought should be given to the arrangement of special jigs and fixtures, because they effect great savings in time and assure more accurate and uniform work. Indexing and rotary fixtures should be employed in machining operations wherever possible, because they often make it possible to reduce the time

for performing the entire operation to that formerly required to remove and place the part in the machine. The use of two fixtures, where the removal of a fixture is necessary for a reload, is often advantageous, and considerable time can be saved because the operator will be loading one while the cut is being made on the other.

Every possible effort should be exerted to eliminate abnormal conditions with respect to material. Material on castings in excess of that necessary to insure the required finish should be eliminated. Excess material not only requires more time to machine without improving the finish of a product, but also results in great waste. It is very common to see a machine operator removing $\frac{1}{2}$ " or more material, when it should not be necessary to remove more than $\frac{1}{4}$ " to perform a perfect job. BY G. J. STEGEMERTEN. *Industrial Engineer*, September, 1943, p. 27:4.

Savers

FOUR possible ways to save precious paperboard:

1. Redesign containers to cubical form, most economical in material consumption; and provide for opening on smallest dimension of container, to keep flap sizes the smallest possible.
2. Eliminate slack fills, top and bottom pads, liners, and all unnecessary overlapping and overhanging.
3. Replace tuck-ends with sealed-type ends.
4. Most important of all, reuse every container possible.

—*Modern Industry* 1/15/44

• THE ARMY has already terminated about 8,500 prime contracts with a value of close to \$6,000,000,000. (This is nearly \$2,000,000,000 more than the face amount of the 27,000 terminated contracts in World War I.)

—*Modern Industry* 10/15/43

Marketing Management

Measurement and Selection of Salesmen

WHEN a business enterprise begins to face the task of beating its swords back into plowshares, one of the most disturbing problems is the rebuilding of a sales organization. In highly competitive businesses, the selection, training and placement of salesmen has become a front-rank problem in company postwar planning.

Judging from reported researches in this field during the last two years, one must assume that educational or psychological measurements have done little or nothing to help business with this particular task. This is not surprising, because such a problem presents many elusive factors. C. L. Shartle once said: "We have studied something like 20,000 occupations, and we find that the difficulty encountered in devising improved selection techniques for sales work is probably not equaled in any other group of occupations."

Many measurement studies in salesmen's selection have been reported, showing varying degrees of success, but they are scarcely more than suggestions of channels that might be opened in the future. Kornhauser and McMurphy, after two years of careful follow-up, noted a reduction in turnover of 23 per cent, and an increase in production of 6.5 per cent, as a result of using a weighted personal history (application) blank, personality test items, and standardized analytical interviews. The first two devices alone were able to eliminate 31.8 per cent of those later shown to be failures, and 22.4 per cent of the mediocre

men, while losing 6.7 per cent of good men. Goldsmith set a critical score on a weighted personal history blank which eliminated 54 per cent of the failures while losing 16 per cent of successful men. The Life Insurance Sales Research Bureau has developed an "Aptitude Index" consisting of two parts—i.e., weighted personal history items and a test of personality characteristics. This index yielded a validity coefficient of 0.40 when correlated with amount of sales as a criterion.

Reports on measures of extraversion and dominance vary considerably. The Bernreuter test is frequently employed in these studies. Some companies have selected from personality tests only those items having validity in their own situations. Lovett and Richardson claim validity for a home-made test of social attitudes, finding that salesmen have a tendency toward conventionality. These authors attribute little value to testing for mental alertness. Schultz supports this view in general, but points out that intelligence tests do help eliminate the most unqualified candidates. Job analyses made in the Radio Corporation of America on distributor and specialist sales jobs seem to indicate that intelligence is a factor important to success.

Ohman and Ream achieved success with some specially constructed tests of sales ability. One must be on guard, however, against testing for "general sales ability," because the situation in each company is unique.

Strong's interest inventory was used

with some predictive accuracy when scored for "life insurance salesmen." This test plus a personal history blank was used by Bills, and she reported the Strong test alone was "good for the purpose." Bills found it necessary, in setting up prediction scores, to group the subjects by age.

Rating scales for salesmen's traits have been devised by Knowles, who evaluated appearance, character, intelligence, ability to get along with others, industry, initiative, efficiency and leadership. Rating seems to be a questionable selection device, even though it often has usefulness as an evaluation of success or adjustment.

Difficulties in developing selection devices for salesmen seem to fall into two types: (1) those due to inability to isolate and measure personality attributes, and (2) those due to the specificity of a salesman's work.

1. *Personality Attributes.* Success in selecting salesmen undoubtedly waits on better techniques for measuring "personality." Many of the instruments enjoying wide usage today assume that we can get an honest self-report from the testee on a large number of personal questions.

Where we are dealing with non-abnormal persons, it seems safe to deduce that the important personality information should be concerned not so much with symptoms of maladjustment as with the sources of conflict that may lead to any maladaptations. In selecting successful salesmen, it is important to find those whose psychological environments will be conducive to continued good adjustments. In an indirect way the success of the personal history blank may be attributed to this principle.

One area for further research then would involve the conflicts that are detrimental in sales work. Methods of measurement for sources of conflicts must be devised. One method which might prove useful is the measuring of attitudes toward the home situation, society, races, etc., which might be favorable or unfavorable to adjustment. Attitudes can be measured without too much prying into one's personal affairs.

The *projective techniques* for diagnosing personality might be helpful in this particular field. Recent researches indicate that effective group studies can be conducted with the Rorschach ink blot test. The comprehensive scoring methods of the Rorschach might uncover significant relationships with sales success. There is also need for systematic study of the *situational relationships* in which a salesman is placed. The nature of the relationships involved in a sales interview should be studied with a view toward predicting the type of clientele with which a particular salesman will and will not be successful.

2. *Specificity of Sales Work.* Workers in the field of salesmen's selection are disturbed by difficulties with the evaluation of their methods. Criteria are set up only to be found unstable in the face of a great diversity of situations. Amount of earnings cannot be taken as a criterion of success, since some salesmen have territories in which selling is easier. For the same reason volume of sales is inadequate. The cost of a salesman to the company as a criterion is influenced by the nature of the territory and by the amount of adjustment required of a particular salesman to a particular territory. Ohman found salesmen's net commission

earnings to be most suitable, though this does depend on the difficulty value of the job, as fixed in the assigning of commission bases. A battery of criteria used by Lovett and Richardson consisted of descriptive rating scales, paired rating scale, confidential report on job adjustment and personality, percentage of quota sold, percentage of dealers sold,

and cost of selling per box of soap. In situations where individual job differences make "objective" criteria difficult, rating scales in the hands of trained managers and supervisors may be the best solution. BY DANIEL J. BOLANOVICH and FORREST H. KIRKPATRICK. *Educational and Psychological Measurement*, Winter, 1943, p. 333:7.

Cooperative Advertising Practices

DESPITE the difficulties and headaches involved in cooperative dealer advertising, this form of promotion will definitely be a factor of considerable importance after the war, a study just completed shows.

Querying 125 manufacturers in fields such as household appliances, clothing and shoes, and the automotive industry, where cooperative advertising placed through dealers has always been an important factor, *Advertising Age* received detailed responses from 72 companies, indicating an unusual degree of interest in the subject. Of these, 58, or 80.6 per cent, used co-op dealer advertising in one form or another before the war; and 51, or 70.8 per cent, expect to use it again after the war, while three others have not yet definitely decided on their postwar policy.

Newspaper advertising is most often included in a co-op advertising setup, and will continue in this position after the war, the results indicate, with spot radio in second place, direct mail third, and window displays fourth.

By far the greatest number of manufacturers pay for their co-op advertising with dealers on a 50-50 basis, and most expect to continue this practice after the war, although a wide variety of other arrangements for payments is made. In most cases maximum expenditures are set, usually at 3 per cent of the value of goods bought by retailers.

The manufacturers were asked: "What is the most important thing to guard against in establishing or carrying out a dealer cooperative advertising program?" Responses indicate that (1) keeping costs within reason, (2) making sure that allowances are actually used for advertising, and (3) seeing to it that dealer advertising follows the general factory policy, are the three most vexing problems.

—*Advertising Age* 2/21/44

• **DOING BUSINESS** without advertising is like winking at a girl in the dark. You know what you're doing but no one else does.

—*The Advertiser's Digest* 1/44

Salesmen Do Well

FOR one reason and another, the highly specialized sales forces of American business have never become the war casualty they were expected to. A survey of representative manufacturers reveals that: (1) The decrease in sales personnel has averaged only 25 per cent, more a result of the draft than a curtailment in sales opportunities; and (2) the remaining 75 per cent have generally increased earnings. Although in almost no case has a company changed its basis of compensation—a significant fact in itself—the average increase in earnings probably has been between 20 and 30 per cent.

—*Business Week* 11/6/43

So You Want to Be an Exporter!

TO American manufacturers, appraising the problems inherent in the expanding facilities of their plants and those of their competitors, foreign markets have a new significance. These manufacturers have survived in the past because they did not let the grass grow under their feet, and they feel that now is the time to make exploratory inquiries into the possibilities of international trade.

Before making any far-reaching decisions in this respect, they are wisely seeking the answers to certain fundamental questions: Is *direct* foreign trade essential to my business? Should I establish and maintain *my own* export organization? Many manufacturers have for years placed their products in foreign markets without being involved in the actual mechanics of exporting. Well-established channels of distribution are available to those who cannot or do not wish to maintain their own foreign selling organizations.

Established foreign traders have looked to the Bureau of Foreign and Domestic Commerce of the Department of Commerce as their source in government of current and detailed information relating to international trade. They have drawn on the Bureau for trade statistics, market surveys, names of selling outlets and sources of raw materials, information on credit, collection, and exchange conditions, tariffs and other local regulations, laws pertaining to commerce, credit terms and prevailing trade practices, competition, local tastes, buying power, and similar basic data representing all the elements entering into foreign trade analysis and promotion.

At the moment, the facilities of the Bureau of Foreign and Domestic Commerce and the American Foreign Service, in collaboration with which foreign market data are compiled, are utilized principally in making studies for the various war agencies. However, a considerable backlog of published and other non-confidential material remains available today, and the Bureau has found it possible to keep certain critical services on a current basis.

To aid the prospective foreign trader, a number of the basic sources of information on international trade have been compiled into a *Guide for the New and Prospective Foreign Trader*. This is a selected list of those sources considered particularly helpful in making the initial inquiries into the problems and techniques of foreign trade, in designating the typical channels of distribution and supply, in delineating the more obviously attractive spheres of activity, and in suggesting other avenues best qualified to provide specific information and services as the need becomes apparent.

Assuming that his initial studies are encouraging, and that the prospective foreign trader wishes to proceed with the analysis of a particular area or areas, the Bureau is prepared to furnish specific answers to specific questions.

The Division of International Economy, comprising the American Republics, European, British Empire and Far Eastern Units, has prepared a number of handbooks supplying essential trade data for practically all foreign areas. The Division of Industrial Economy has prepared studies on all important commodities figuring in international trade, and

its consultants in the fields of foodstuffs, chemistry, drugs, metals and minerals, lumber, machinery, leather, etc., are available for expert advice.

The Advisor on Trade Controls in the Bureau is consulted daily concerning problems that arise in connection with export regulations and various other wartime trade controls.

The Commercial Intelligence Unit provides classified lists of foreign importers, dealers, agents, industrial firms, and local exporters of native products. A file of detailed reports is maintained on more than 800,000 commercial enterprises abroad. From this file information can be supplied promptly concerning method of operation, size, number of employees, capital, annual turnover, ownership or management, representa-

tives or principals in the United States or other countries, and general reputation.

Foreign Commerce Weekly, the counterpart in the foreign field of *Domestic Commerce*, is an important channel for the quick dissemination of information of immediate value to those interested or engaged in international trade.

American firms interested in foreign trade identify themselves by registering for the Bureau's "Exporters and Importers Index." In doing so, they provide certain information concerning their background and activities which enables the Bureau to assist them intelligently. An application blank (Forms 57 and 57A) is provided for this purpose. BY EDMUND F. BECKER. *Advertising & Selling*, January, 1944, p. 66:2.

Guides to Successful Sales Training

HERE are 10 basic rules which should be followed in training salesmen for postwar selling:

1. Aim your program at building habits instead of merely informing.
2. Make your course broad enough to cover all the salesman's problem's. Don't stop with product description. Include all elements which enter into the salesman's workday.
3. Be proud of your country's economic system and your part in it.
4. Don't confuse sales training with a college course. Your training is not broad, liberal, scholarly education—it is vocational training. So avoid academic terms, atmosphere. Borrow college professors—but only after due consideration.
5. Spread your training dollar and minutes over all your salesmen—not just the new men. Veterans need periodic re-education and re-stimulation. Each campaign, each new product announcement, each seasonal drive can have its accompanying training activity.
6. Make your salesmen part of the planning and actual training.
7. Develop each salesman as an individual. The line between average men and toppers often is merely a better understanding by each individual of his capabilities and limitations.
8. Don't spend all your training dollar on meetings. Spend a liberal portion of your training appropriation in field training.
9. See that your branch managers and supervisors undergo a stiff course in management.
10. Wherever possible, avoid the speeches and hold a "conference." This technique works especially well in manager and veteran salesman training. It consists of small groups sitting around a table, conferring on mutual problems. Not flashy, but sound.

—WILLIAM RADOS before the Northwestern Sales Executives' Conference

Financial Management

Problems in Renegotiation

SO much has been written on renegotiation procedure that there seems little value in attempting to repeat it. It might be profitable, however, to illustrate the practices of price adjustment boards by citing the experiences of several small and moderate-sized contractors. (It is probable that the difficulties of renegotiation are greater for the small contractor—particularly the new enterprise—than for the larger and better-established company.)

Consider the case of a contractor who realized a profit of \$400,000, before taxes and renegotiation, on sales of \$2,000,000. The adjustment board thought a refund of \$200,000 appropriate, giving him 11-1/9 per cent on his adjusted sales, or 10 per cent on what he had fondly imagined were his gross sales. If his taxes were calculated under the 80 per cent limitation, his effective rate would be 72 per cent after deducting his postwar refund. Taxes on his remaining profit of \$200,000 would, therefore, be \$144,000, and \$56,000 would remain as an apparent net income. This is a profit of a little over 3 per cent on adjusted sales and, if it was a genuine realized profit, it might be enough to preserve at least the contractor's prewar position. But if the company needed at least \$200,000 to provide for the impact of postwar expenses and liabilities, it would have no profit whatever after the refund demanded by the adjustment board had been made. Or, to put it another way, if provision of postwar ex-

penses and liabilities were permitted by the federal tax laws and if such provision were recognized by the price adjustment boards, no refund would have been required. The problem was not to decide whether an excessive profit had been made but whether any profit at all had been realized; and the deciding factor was the necessity, unrecognized by the Treasury or the adjustment boards, for reserves for postwar expenses and liabilities. (The writer avoids use of the term "contingencies" here, since an item cannot properly be described as contingent when the event which will bring it about is certain and only its amount is uncertain.)

In the case we are considering, the company had expanded its volume some 10 times during the war; and it had a payroll which was, for two weeks, equal to practically the entire annual profit of the company after taxes. If this company's payroll for two weeks amounted to \$50,000 and two weeks' pay was allowed as dismissal compensation, practically the entire net income, after taxes, would be required to cover this liability. It is true that if the company disbursed the severance pay in a period of loss it could be carried back to the year in which the profits to which it was related were made. From a tax viewpoint this is not particularly damaging or undesirable, because taxes are not irrevocably closed when the first determination of tax is made for any year. However, a determination of this sort by a price ad-

justment board is, under the present law, as irrevocable as a judgment of Rhadamanthus.

But this is not the only postwar expense or liability which the company must consider. Costs of reconversion, of maintaining organization during reconversion, deferred maintenance and development, and experimental work interrupted by the war attributable to the year in question, might well amount to substantially more than \$150,000.

It would not be particularly objectionable to make refunds to the adjustment boards which were subject to correction. On the extreme theory of probability illustrated by Eddington when he said that "If an army of monkeys were strumming at typewriters they might write all the books in the British Museum," it is even possible that these events might not take place and the boards might have been justified in disregarding them. At any rate, provision for readjustment of refunds would eliminate the threat to postwar survival which the present policy holds for many companies.

In several cases refunds have been demanded which were, perhaps, justified by an apparently excessive percentage of profit on sales before considering liabilities and expenses connected with postwar events. They would, however, result in so crippling the contractor financially that production would suffer. The conditions under which most V-loans are made permit the contractor to use these for carrying inventory, receivables, and current items only, and do not permit him to use the funds for investment in plant. If his own funds which he would, if permitted, invest in plant required for production are demanded as refunds, production will certainly suffer.

It would seem much better to defer renegotiation where the financial condition of the contractor is such as to make payments impossible within a reasonable time. Nothing is lost, as the government can step in as soon as the contractor's assets are in a liquid condition. When this is not so, the very fact that assets are not liquid is evidence that the profits represented by such assets (generally inventory, receivables, prepaid expenses, deferred charges, etc.) are not definite and genuine until some realization and liquidation has taken place.

A renegotiation procedure, say, for the whole war period rather than for specific calendar years has much in its favor. A simple solution of this problem would be a tentative renegotiation for the year, determining a reasonable rate of profit but leaving the amount of profit open to proper adjustment at the close of the year or on termination of all government contracts held by the contractor.

There have been several good descriptions and explanations of the statements required for renegotiation. Probably the best of these is that by Commander N. L. McLaren, of the Navy Price Adjustment Board, published in the October, 1943, *Journal of Accountancy*. This article is particularly informative, as it gives an indication, necessarily authentic because of the position of its author, of the purpose for which each statement is required and the use to which it is put.

One of the most puzzling questions in the mind of the contractor is, "Has my contribution to the war effort been fully recognized in the percentage of sales or in the amount of profit which I have been allowed to retain?"

One case was that of a manufacturer of an essential part of a precision instru-

ment widely used throughout the armed services. After the war had begun, this company had not only allowed competitors to use its patents and formulas without license but had actually loaned technicians to instruct competitors. This company, however, was allowed the same percentage on volume as one of its competitors.

The volume of the company under renegotiation was small because many of its orders were of an experimental nature, which required considerable engineering and designing. The work of its competitor, however, consisted of a few long-run mass-production items which

involved little or no engineering or operational skill once the machine was set up. Here it was evident that the particular board gave little weight to the superior organization or the greater contribution of skill and inventiveness of the company under renegotiation. This condition is probably not universal, but there is no way at present to gauge the relative amount of consideration accorded this factor by price adjustment boards. BY MAURICE E. PELOUBET. From *Accounting Problems in War Contract Termination, Taxes, and Postwar Planning*, The American Institute of Accountants, New York, 1943.

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- THE IMPACT of contract renegotiation on industry is shown in a recent survey of the National Industrial Conference Board. Forty per cent of the companies covered in this study claim that their working capital has been impaired by the renegotiation of war contracts, and one in 12 of these firms reports that this impairment was serious.

A Postwar National Fiscal Program

SOME years ago, a doctor friend of mine told me that if a patient was suffering from both tuberculosis and diabetes, the proper procedure is to treat the diabetes first. "First correct the disorder of metabolism, so that the body may be properly nourished and may help rather than hinder attack on the second disease."

This rule of medicine can be extended to a wider field. The body politic has long been suffering from undernourishment, caused in large measure by disorders of the fiscal program. This undernourishment has brought with it restrictive practices that lead inevitably to government-controlled monopoly, class prejudice, and international tension. The first step is to control the undernourish-

ment and to make sure that the lifeblood of purchasing demand is adequately maintained. Only then can we decide with confidence on the other measures that should be applied.

As a step toward agreement on long-term policy, I suggest the following nine-point postwar federal fiscal program:

First, we want no public spending for its own sake and no projects merely because they support purchasing power in general. Let us base our budget estimates on the efficient and economical carrying out of worthwhile activities to accomplish our national purposes.

Second, let us lower tax rates to the point where they will balance the budget at an agreed level of high employment. Taxes should be reduced where they

will do the most good in creating demand and encouraging private enterprise.

Third, having set our tax rates to balance the budget at high employment, let us leave them alone, except as there are major changes in national policy. When employment goes beyond an agreed level, or if, with high employment, we have a boom in prices, let us hold the surplus or use it to reduce the national debt, not as an excuse for further tax reduction.

Fourth, let us abide by the principle of progressive income taxes and estate taxes as the best way of reversing the tendency of purchasing power to come to rest. Let us reduce the rates on the individual income tax to stimulate consumption and to make possible investment in new enterprise on a business basis.

Fifth, let us plan our public works, not to balance the whole economy, but to help stabilize the construction industry.

Sixth, let us neutralize the social security programs as far as their fiscal influences are concerned. Since their beginning they have been highly deflationary. For old-age security, let us set our rates and benefits so that they come somewhere near balancing; and for unemployment insurance, let us set our rates so that intake and outgo balance at high levels of employment.

Seventh, let us keep the important excise taxes for the time being, and get rid of the rest. If employment and production lag overmuch, let us get rid of these too, except when they have some social purpose, since they are deflationary. We need no general sales tax for fiscal policy purposes, now that the in-

dividual income tax is on a current basis.

Eighth, let us arrange our lending abroad, whether for stabilization, relief or long-time reconstruction, so that it will support rather than counteract fiscal policies adopted to strengthen our domestic economy.

Ninth, and indispensably, let us press for reorganization of the federal agencies concerned with fiscal policy and administration. We want clarity in policy, consistency in administration, and cooperation between the executive and legislative branches. Having gone this far, we will then want to study more intensively the problems of coordination among federal, state and local governments.

This nine-point program raises some questions, and leaves a great deal to be filled in. But if it makes sense, there are no constitutional or technical reasons why it could not be adopted as a framework now, to be ready once peace is declared and we are able to resume our peacetime way of life.

Much has been said and written about public works as a means of providing employment and of evening out the business cycle. Lately, we have become familiar with the phrase "a shelf of projects" to be ready if business should become depressed.

We must not expect too much from a public works program as a general support for high employment. If we believe in the policy of no wasteful public expenditure and no spending for its own sake, the administrative difficulties make proper timing almost impossible, and reduce the potential volume well below the requirements of a true depression. Public works alone cannot do the job.

The most we can expect, and this is

no small gain, is that public works can be planned and undertaken in such a way as to even out the activities of the construction industry itself thereby providing a reasonable level of construction throughout the year and year after year. Some rough approximation could be made of what aggregate employment in construction would be suitable over a period of years; and to maintain the desired volume of construction, public works might be undertaken when private construction fell off.

What level of employment in the construction industry should we take as a

long-time normal? The suggestion has been made that we might take as a rough standard the average rebuilding of our physical plant once a generation. This suggestion has the appeal of picturing each generation turning over to the next generation new, modern structures instead of old, outmoded houses, schools and factories. It has been estimated that such a program would require about 8 per cent of the national produce and would keep 6,500,000 men employed on and off site. BY BEARDSLEY RUMML. *The New Republic*, February 28, 1944, p. 265:8.

Business Cash Resources

INDUSTRIAL reconversion will impose a financial strain upon American business. Large wartime tax accruals will have to be paid off. Plants will have to be reconverted, and deferred maintenance and equipment purchases made up. Inventories of civilian goods will have to be replenished, and credit will have to be extended to civilian customers once again.

The National Economics Unit of the Department of Commerce has undertaken to estimate these requirements for all business, and to compare total needs with the resources available. Tax accruals at the end of the war are estimated at \$8,000,000,000 for all business; and plant expenditures of all kinds to restore industry to its prewar status, \$17,000,000,000. Financing peacetime inventory and accounts receivable, on the prewar basis, would require another \$11,000,000,000, making aggregate reconversion needs \$36,000,000,000 in all.

Business as a whole will have more than enough money to finance these huge requirements, the Department of Commerce believes. Some \$35,000,000,000 in cash and government securities have been accumulated during the past two years. Prompt settlement of claims against the government under war contracts would provide from \$9,000,000,000 to \$14,000,000,000 more, it is estimated, and depreciation and other reserves accumulated during the transition year would furnish another \$5,000,000,000 or so.

—*The Journal of Commerce* 2/28/48



Insurance

Liability for Premium Overtime Labor

IN the light of current conditions, the question of whether insurers are liable for premium overtime labor in the event of loss is a pertinent one.

Most standard fire policies insure "... to the extent of the actual cash value" against "... all direct loss and damage by fire" and "... without compensation for loss resulting from interruption of business or manufacture." Consequently, underwriters feel that where extra expenses are incurred to prevent further loss of use of the property involved and are solely for the benefit of the insured, they are indirect or consequential expenses, to be covered by such consequential insurance as "Extra Expense" and "Use and Occupancy" policies.

However, each loss must be judged individually, and the question to be decided in each case would appear to be whether or not the cost of repairs, under the circumstances, is reasonable. Where the work is to be done by an outside contractor and the bid for the work has been secured without any special instructions to the contractor, whether or not he uses overtime labor, the ultimate cost to the insured is a proper charge against the insurers.

It is usually only in cases where the insured makes the repairs that the question of premium overtime labor occurs in the adjustment of a loss. In most of these instances, the insured makes the repairs at his own convenience and at times when the work will not interfere with normal operations. In such cases the extra expense has definitely been in-

curred to prevent loss of use of the property involved and is solely for the benefit of the insured. In these circumstances, premium overtime labor would not be a proper claim under property insurance but would be collectible under Extra Expense or Use and Occupancy coverages.

Even in some cases where the insured makes the repairs himself, premium overtime labor may be a proper charge against property insurance. Consider, for instance, a plant located in an isolated territory where it is necessary for the insured to assure workmen that they will get good wages and liberal overtime in order to prevail upon them to go to such a place for employment. Under such circumstances, the overtime is a normal part of the cost of repairs.

Another condition which creates an arguable basis for the collection of overtime charges in connection with repair and reconstruction is particularly prevalent today. War plants have been erected on a 24-hour basis because of production exigencies. The cost of such construction usually includes overtime and constitutes the basis upon which insurance is taken out. It is well established that underwriters are presumed to know the nature and customs of the businesses they are insuring. It would follow that, under such circumstances, the cost of repair or reconstruction of buildings so erected and so insured on an overtime basis would be reasonable within the terms and conditions of the property insurance.

The Insurance Broker-Age, November, 1943, p. 8:1.

Defending Products Liability Claims

THE producer of consumer goods is frequently held liable for negligence in manufacturing, packing or distributing his products. It has become quite the fashion, particularly in certain Southern states, to sue for injuries to the stomach and nervous system by reason of the presence of cockroaches, spiders, and other foreign substances in bottled drinks. Among other causes of claims alleged are bursting bottles, exploding cans, glass in candy, bolts in pie, and poison in flour.

Restaurant proprietors and other purveyors of food are held to strict liability. In a recent case, the plaintiff stated that he was eating beef stew and had consumed a goodly portion of it when he came upon part of a well-cooked mouse. He had been unable to keep anything on his stomach ever since. The defendant showed that he purchased the best quality of food, that it was carefully prepared, and attempted to show that there was no mouse. The jury believed that there was a mouse, for it rendered a verdict for \$10,000 in favor of the plaintiff.

These cases are dangerous ones to dispose of by settlement, for payment in one case may result in innumerable claims. Further, it is unfair to the reputation of a hotel or restaurant proprietor to settle a case merely for the purpose of avoiding expense to the insurance company. Of course, greater damage may be done to the defendant's reputation if there is an adverse verdict and attendant publicity. It is, therefore, apparent that a grave responsibility rests upon insurance companies in cases of this nature.

The United States Fidelity & Guaranty Co. has just completed the defense of a case in which a woman and her husband ate in a hotel dining room which was insured by the company for products liability. The husband brought suit because he claimed his wife had died as a result of eating a poisonous steak. He claimed to have been made ill for a number of days by the same food. Both people were prominent, and the case was dangerous because the deceased woman's doctor maintained that her death was due to the food eaten, which cause was also cited in the death certificate. The woman had been suffering from diabetes for a number of years, and the death certificate showed that she had died from diabetes aggravated by poisonous food. A large demand was made, but this was subsequently reduced to \$7,500. It was decided that, instead of making any payment, the insurer would prepare the case as thoroughly as possible and endeavor to defend the hotel proprietor's reputation. It was shown that no one else claimed to have been made ill on the day in question, although several hundred people ate in the hotel dining room. Several experts testified that, even if the woman had eaten unfit food, it would not have been sufficient cause of death. The jury decided in favor of the hotel defendant.

Although in most instances verdicts are comparatively small on food and products cases, the cost of defense is considerable because of the necessity of employing experts to prove that proper precautions were taken by the defendant.

BY H. D. COMBS. *The Casualty Insuror*, January, 1944, p. 19:1.

The Hidden Fire Tax

A HIDDEN "fire tax"—comprising indirect fire losses of well over \$1,000,000,000—is paid by the people of this country every year. In 1943, for example, the direct fire loss was \$380,235,000, but the indirect fire loss was three times as much.

Indirect fire losses may be hidden in the cost of raw materials and finished goods; they may be reflected in municipal and state taxes, in loss of customer good will, in higher insurance premiums; or they may take the form of a business setback, temporary idleness, or even bankruptcy. The National Fire Protection Association reports, for instance, that each dollar of direct fire loss represents four man-hours of production lost, that fires in industry are now consuming at least 400,000,000 man-hours of work a year.

—DELBERT JOHNSON in *Forbes* 2/15/44

• NINETY PER CENT of employee disability is not provided for if the employer depends on workmen's compensation coverage alone, according to Asa P. Lombard, assistant manager of the group department of John Hancock Mutual Life Insurance Company. Ten per cent of disability claims result from accidents at work, 5 per cent from accidents away from work, and 85 per cent from sickness.

—*The Weekly Underwriter* 2/26/44

Survey of Books for Executives

Accounting in the Administration of Large Business Enterprises.

By Charles A. Heiss. Harvard University Press, Cambridge, Mass., 1943. 68 pages. \$1.25.

*Reviewed by Wyman P. Fiske**

The author of this valuable little book recently retired as comptroller of the American Telephone & Telegraph Company, after almost a quarter century's service in that capacity. He therefore speaks with the authority of long experience in every phase of administrative accounting. This alone would make his philosophy and practical suggestions worth careful study. His approach to the responsibilities and du-

ties of the controller is both broad and progressive, and he displays a truly professional attitude when he says that the controller "is primarily responsible for the integrity of the accounting and financial records . . . a responsibility which runs not only to management, including its directors, but to the stockholders and all those who have invested their funds in the business, to governmental regulatory and tax authorities, and to the public which is served."

The material covers the entire range of the controllership function. Very properly, more than a third of the book is devoted to a consideration of the controller's job and of his relations to the public and the government. The balance discusses in some detail the more im-

* Director, Sponsored Fellowship Program, Massachusetts Institute of Technology.

portant sections into which the many activities for which the controller is responsible are ordinarily divided for administrative purposes. These include statistics and reports, depreciation, systems and procedures, and budgets and control. An appendix of more than ordinary interest to cost accountants describes developments in cost accounting practices in a large manufacturing company during the past half century. This appendix provides a concise historical review of improvements in cost meth-

ods, adopted in this particular case in the sequence in which they appeared in industrial accounting practice. Throughout the volume is reflected the leadership which has made the statements of the American Telephone & Telegraph Company examples of complete and frank reporting.

The material in this book was delivered as the sixth of a series of annual Dickinson Lectures at the Harvard Graduate School of Business Administration.

Briefer Book Notes

GOVERNMENTAL ADJUSTMENT OF LABOR DISPUTES. By Howard S. Kaltenborn. The Foundation Press, Inc., Chicago, Ill., 1943. 327 pages. \$3.50. A detailed survey of the activities of federal, state and local governments in the settlement of labor disputes. Subject headings include: The United States Conciliation Service; The Adjustment of Labor Disputes in the Railroad Industry; Maritime Labor Board; National Defense Mediation Board; National War Labor Board; The States and the Adjustment of Labor Disputes; Local Governments and the Adjustment of Labor Disputes; Major Problems in Mediation in Labor Disputes and General Recommendations. The author is Chief Wage Analyst, Regional War Labor Board, Detroit.

ABSENTEEISM: MANAGEMENT'S PROBLEM. By John B. Fox and Jerome F. Scott. Bureau of Business Research, Graduate School of Business Administration, Harvard University, Boston, 1943. 28 pages. \$1.00. This report of a case study of absenteeism in three metalworking companies offers a fresh approach to the problem. Confused or inadequate management is shown here to be an actual cause of absenteeism; and the investigators strikingly disprove the misconception, prevalent in the area under study, that absenteeism affects the large mass of workers. A new statistical approach to the absentee problem, and a possible method of forecasting the trend of absenteeism, are suggested.

INDUSTRIAL MANAGEMENT. By Asa S. Knowles and Robert D. Thomson. The Macmillan Company, New York, 1944. 791 pages. \$4.50. The main parts of this text deal with different, but closely related, subjects of industrial management—i.e., management of physical property, organization of the physical plant, management of manpower, production control, cost control. A considerable portion of the subject matter, notably that pertaining to the management of physical property, appears here in organized textbook form for the first time. Practical problems are appended to each section.

COMPANY MUSEUMS. By Laurence Vail Coleman. The American Association of Museums, Washington, D. C., 1943. 173 pages. \$2.50. Eighty companies in the United States are known to have museums of their own in which articles related to their history, present work, and general developments in their lines are preserved. This manual shows the nature and usefulness of such museums and may serve as a simple guide for those who manage company museums or to firms contemplating their establishment.

ANALYSIS OF MACHINE SHOP OPERATIONS: A Manual for Training Apprentices and Learners. By Donald F. Lane. National Foremen's Institute, Inc., Deep River, Conn., 1943. 165 pages. \$7.50. This manual consists primarily of a breakdown of all the operations

of the machinist trade. Nineteen sets of data sheets are provided, one for each of the common machine tools and processes—power saw, drill press, turret lathe, bench work, heat treating, etc. Each set includes a brief description of the machine or process, a list of operations performed, the tools required to perform the operations, pertinent related information, and an estimate of learning time. The text also gives a brief account of how the analyses should be used.

250 TEACHING TECHNIQUES. By Edward C. Estabrooke and R. Randolph Karch. The Bruce Publishing Company, Milwaukee, 1943. 131 pages. \$1.25. Answers the need for a compact presentation of the duties and responsibilities of instructors and a study manual for industrial teachers-in-training. Topics include: qualities of a good instructor; shop training; how to plan and present a lesson; how to conduct demonstrations; oral questioning and discussion; how to use motion pictures and film strips; how to use tests; maintaining discipline; how to make a course of study; how to write instruction sheets.

FINANCING EQUIPMENT FOR COMMERCIAL AND INDUSTRIAL ENTERPRISE. By Raymond J. Saulnier and Neil H. Jacoby. National Bureau of Economic Research, New York, 1944. 95 pages. \$1.50. Traces the growth of instalment financing of equipment purchases, discusses its practice by both banks and commercial finance companies, shows the characteristics of the business enterprises employing this financing method, and describes its procedures and operating results.

GUIDE TO METHODS IMPROVEMENT. By Harold B. Maynard and G. J. Stegemerten. McGraw-Hill Book Company, Inc., New York, 1944. 85 pages. \$1.00. This book shows how, by systematic adoption of the questioning attitude—by saying "Why?" to every operational element in the shop—many improvements in production and methods may be made. It indicates the 10 points of opportunity for operational improvement, gives over 400 questions that may be applied to these points, and cites examples of their use and the benefits derived in actual situations. Recommended to methods engineers, foremen, and workmen who wish to make their jobs easier and more productive.

THE PRINCIPLES AND PRACTICE OF INDUSTRIAL MEDICINE. Edited by Fred J. Wampler, M.D. The Williams & Wilkins Company, Baltimore, 1943. 579 pages. \$6.00. This manual—the result of the coordinated effort of 32 experts from every field of industrial medicine—offers authoritative treatments of the various factors involved in industrial health protection. The contributors outline present-day concepts of the relationship of industrial environment to physical well-being, and show how such knowledge may be applied by the plant physician to doing a better job of keeping workers well.

PLANT-PRODUCTION DIRECTORY: *Industry's Buying Guide.* Fall Edition, 1943. Plant-Production Directory, 333 N. Michigan Avenue, Chicago. (Free to industrial executives.) "Where to buy it" information covering every product classification of importance—with the names and addresses of the manufacturers—and supplementary sections devoted to Used and Rebuilt Machinery, Chemicals, Mechanical Data, and Trade Names.

WAGE STABILIZATION AND INFLATION. Compiled by Julia E. Johnsen. The H. W. Wilson Company, New York, 1943. 187 pages. \$1.25. This number of the Reference Shelf, supplementing a previous volume entitled *Wages and Prices* (published in April, 1942), includes articles, addresses and bibliographical material on wage stabilization and inflation covering a period when the subject has taken on new immediacy and become of increasing vital concern.

HOW TO EDIT AN EMPLOYEE PUBLICATION. By Garth Bentley. Harper & Brothers, New York, 1944. 200 pages. \$2.50. In this book, by a prominent industrial editor, the main considerations involved in launching and editing an employee magazine are expertly treated. Both amateur and experienced editors will find it a ready source of ideas and suggestions.

MANAGERIAL CONTROL THROUGH INTERNAL AUDITING. By Victor Z. Brink, C.P.A. Brock and Wallston, Stamford, Conn., 1943. 97 pages. \$1.50. The author provides a general explanation of the activities carried on by the internal auditing staff and shows how its services can best be utilized by corporate management. The book is comprised of six parts: (1) The General Nature of Internal Auditing; (2) Major Types of Internal Auditing Activities; (3) The Internal Auditing Program; (4) Audit Records and Reports; (5) The Place of the Internal Auditing Department in the Company Organization; and (6) Coordination of Internal Auditing with the Work of the Public Accountant.

GEOGRAPHY FOR THE BUSINESSMAN. By Eugene Van Cleef. Harper & Brothers, New York, 1943. 246 pages. \$2.75. Shows how modern geographical knowledge can be applied to a variety of business problems. Such topics as maps, markets, resources, boundaries, weather, etc., are discussed in relation to specific problems of retailing, advertising, construction, farming, price control, etc.

THE RETURN OF OPPORTUNITY. Edited by William R. Kuhns. Harper & Brothers, New York, 1944. 335 pages. \$3.00. Leaders in 150 important industries discuss the postwar outlook for work and careers. Emphasis is placed upon new vocational opportunities, new products and processes, and new ways of making familiar products better. Here are optimistic views on what the postwar opportunities will be; how they can be developed; and what they will mean to those who must face the task of resuming old careers or choosing new ones.

REHABILITATION OF THE WAR INJURED. Edited by William Brown Doherty, M.D., and Dagobert D. Runes, Ph.D. Philosophical Library, Inc., New York, 1943. 684 pages. \$10.00. A symposium by a group of eminent physicians and guidance counselors on the physical and mental restoration of injured servicemen. Includes significant papers on occupational therapy and vocational guidance which will be of interest to industrial physicians, vocational counselors and therapists.

THE PSYCHOLOGY OF MILITARY LEADERSHIP. By L. A. Pennington, Lt. Col. R. B. Hough, Jr., and H. W. Case. Prentice-Hall, Inc., New York, 1943. 288 pages. \$2.95. This practical handbook sets forth the major psychological rules-of-action that the officer can use both in guiding his men and in adapting himself to his superior and subordinate officers. Though directed primarily to a military audience, the book covers the fundamental principles of human engineering in such stimulating fashion that it is recommended reading for industrial executives.

MANPOWER UTILIZATION. *Factory Management and Maintenance*, New York, 1943. 575 pages. \$5.00. Practical case material based on the experience of 329 plants, classified under 10 headings to facilitate reference and use: Recruiting, Inducting, Guiding; Selecting and Testing; Training; Incentives; Production Drives; Layout and Handling; Methods Engineering; Production Control; Health, Safety, Nutrition, Recreation; Maintenance. Originally published in *Factory Management and Maintenance*.

HOW TO DEVELOP YOUR EXECUTIVE ABILITY. By Daniel Starch. Harper & Brothers, New York, 1943. 267 pages. \$3.00. A study of the abilities through which executives have forged ahead in the business world. The book is based in large part on an analysis of the business careers of 150 present-day executives, including the top executives of 50 leading enterprises as well as 50 mid-level and 50 lower-level concerns. Dr. Starch stresses four factors which he considers essential to the development of executive talent.

ESSENTIALS OF PRECISION INSPECTION. By Wesley Mollard. McGraw-Hill Book Company, Inc., New York, 1944. 207 pages. \$3.00. A work manual containing detailed instruction in the use of the various measuring instruments; technical and related information on checking the location of holes, threads, gears, etc., and the procedures to be followed in checking a piece of work to specifications.

STRUCTURAL VISUALIZATION. By Johnson O'Connor. Human Engineering Laboratory, Boston, 1943. 189 pages. \$2.00. A discussion of basic human traits and abilities and of the aptitude tests devised by the Human Engineering Laboratory to measure them. This brochure replaces *Characteristics Common to Engineering Executives*, issued previously by the same publisher.

PERTINENT PAPER FACTS: *An Information Manual.* By Dewey Elish. M. M. Elish & Co., Inc., New York, 1943. 145 pages. \$2.00. A guide to the easy and accurate selection of the proper grades of paper for correspondence, duplicating, advertising, and other printing and office uses.

TIME STUDY ENGINEERING. By William H. Schutt. McGraw-Hill Book Company, Inc., New York, 1943. 426 pages. \$5.00. Through step-by-step descriptions of studies made on various machines, this text presents a detailed analysis of time study procedures.

ODD SHIFT RECREATION. Industrial Recreation Association, Chicago, 1944, 19 pages. This manual examines the difficulties encountered in the pursuit of recreation at odd hours, and indicates steps which may be taken to overcome loss of recreational opportunities for shift workers.